

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in this application.

- 1.(Previously Presented) A computer for dynamically mirroring a data storage configuration comprising:
  - a data interface coupled to a data storage medium through which information relating to a first storage configuration of the first data storage medium is communicated;
  - a software agent embodied on a computer readable medium for comparing the first storage configuration to a second storage configuration, and at least when a storage configuration parameter differs between the first and the second storage configurations, for one of automatically conforming the first storage configuration to mirror the second storage configuration and automatically outputting a change to be made to conform the second storage configuration to mirror the first storage configuration;
  - a communications interface through which one of the second storage configuration is received and the change to be made is transmitted; and
  - a data processor for executing the software agent;wherein the software agent is further for, while conforming the second storage configuration to mirror the first storage configuration, querying a state of the conforming for one of a proper configuration of the first or second storage configurations or a failure of a link over which the second storage configuration is received or the change to be made is transmitted.
- 2.(Original) The computer of claim 1 wherein the storage configuration parameter is selected from the group: a database layout; a logical unit number (LUN) type; a LUN size; a measure of LUN performance; and a measure of LUN reliability.
- 3.(Original) The computer of claim 1 wherein the software agent is configured to one of output the first storage configuration to and receive the second storage configuration from a second software agent through the communications interface.
- 4.(Original) The computer of claim 1 wherein conforming the first storage configuration to mirror the second storage configuration comprises creating a secondary LUN based on at least one of a LUN type and a LUN size received through the communications interface when a primary LUN of the data storage medium is unsuitable.

5.(Original) The computer of claim 1 wherein the software agent receives the first storage configuration from a relational database management computer program.

6-18 (Canceled)

19.(Previously Presented) A method of automatically extending a storage systems hardware mirroring function, comprising:

mapping volumes received from a particular local storage system corresponding to physical LUNs, said physical LUNs being mirrored to a remote storage subsystem, and querying a state of the mirroring to determine a proper configuration for an application or database;

if the application or database is not configured properly to perform mirroring, then:

evaluating remote mirror LUNs based on at least one of size, type, performance and reliability to find a suitable LUN;

creating a suitable remote mirror LUN if a suitable LUN is not found; and creating a suitable target and mirroring a volume if a volume is to be added.

20.(Canceled)

21.(Original) The method of claim 19, wherein said evaluating determines a proper modification at said remote storage subsystem that includes invoking procedures to mirror at least one new volume and assigning the at least one new volume to said remote storage subsystem.

22.(Original) The method of claim 21, wherein said modification further includes adding at least one new volume to an operating logical volume, updating a remote storage subsystem and invoking procedures to mirror said at least one new volume.

23-24 (Canceled).

25.(Previously Presented) The computer of claim 1, wherein the software agent is further for, automatically responsive to a determination from the querying of an improper configuration of the first or second storage configuration:

evaluating remote mirror LUNs based on at least one of size, type, performance and reliability to find a suitable LUN;

creating a suitable remote mirror LUN if a suitable LUN is not found; and  
creating a suitable target and mirroring a volume if a volume is to be added

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26.(Previously Presented) The computer of claim 1, wherein the software agent is further for, automatically responsive to a determination from the querying that the link has failed, one of determining another link or creating a new link, separate from the failed link.

27.(Previously Presented) A computer program embodied on a computer readable storage medium for extending a storage systems hardware mirroring function, the computer program comprising instructions for:

mapping volumes received from a particular local storage system corresponding to physical LUNs, said physical LUNs being mirrored to a remote storage subsystem, and querying a state of the mirroring to determine a proper configuration for an application or database;

if the application or database is not configured properly to perform mirroring, then:

evaluating remote mirror LUNs based on at least one of size, type, performance and reliability to find a suitable LUN;

creating a suitable remote mirror LUN if a suitable LUN is not found; and  
creating a suitable target and mirroring a volume if a volume is to be added.

28.(Previously Presented) The computer program of claim 27, wherein said evaluating determines a proper modification at said remote storage subsystem that includes invoking procedures to mirror at least one new volume and assigning the at least one new volume to said remote storage subsystem.

29.(Previously Presented) The computer program of claim 28, wherein said modification further includes adding at least one new volume to an operating logical volume, updating a remote storage subsystem and invoking procedures to mirror said at least one new volume.

30.(Canceled)